## The first of the f

5

10

15

20

25

30

## WHAT IS CLAIMED IS:

- 1. A method for cutting integrated circuit packages, comprising: providing an integrated circuit package; and cutting the integrated circuit package with a water jet.
- 2. The method of Claim 1, wherein cutting the integrated circuit package with a water jet comprises:

positioning the integrated circuit package adjacent a water jet;
pressurizing the water jet such that the water jet is operable to cut the integrated circuit package; and
cutting the integrated circuit package to a predetermined shape.

- 3. The method of Claim 1, wherein providing an integrated circuit package comprises providing a ball grid array package.
- 4. The method of Claim 1, wherein cutting the integrated circuit package with a water jet comprises cutting the integrated circuit package with a water jet having a plurality of abrasive particles.
- 5. The method of Claim 2, wherein pressurizing the water jet comprises pressurizing the water jet to a pressure between approximately 500 psi and approximately 2500 psi.
- 6. The method of Claim 1, wherein cutting the integrated circuit package with a water jet comprises cutting a plurality of integrated circuit packages by directing the water jet along at least one of a plurality of edges of the integrated circuit packages.
- 7. The method of Claim 1, wherein cutting the integrated circuit package with a water jet comprises cutting the integrated circuit package such that an interior portion of the integrated circuit package is accessible for testing.

The first of the f

5

10

15

20

- 8. A method for cutting integrated circuit packages, comprising:
  providing an integrated circuit package;
  positioning the integrated circuit package adjacent a water jet;
  pressurizing the water jet such that the water jet is operable to cut the integrated circuit package; and
  cutting the integrated circuit package to a desired shape.
- 9. The method of Claim 8, wherein providing an integrated circuit package comprises providing a ball grid array package.
- 10. The method of Claim 8, wherein cutting the integrated circuit package to a desired shape comprises cutting the integrated circuit package with a water jet having a plurality of abrasive particles.
- 11. The method of Claim 8, wherein pressurizing the water jet comprises pressurizing the water jet to a pressure between approximately 500 psi and approximately 2500 psi.
- 12. The method of Claim 8, wherein cutting the integrated circuit package to a desired shape comprises cutting a plurality of integrated circuit packages by directing the water jet along at least one of a plurality of edges of the integrated circuit packages.
- 13. The method of Claim 8, wherein cutting the integrated circuit package to a desired shape comprises cutting the integrated circuit package such that an interior portion of the integrated circuit package is accessible for testing.

15

20

25

5

10

- 14. A system for cutting an integrated circuit package, comprising:

  a computer operable to generate a predetermined cut pattern for the integrated circuit; and
- a water jet machining system operatively coupled to the computer and operable to generate a water jet with a suitable pressure for cutting the integrated circuit package into the predetermined cut pattern.
- 15. The system of Claim 14, wherein the water jet machining system comprises:

a water supply;

an intensifier pump operatively coupled to the water supply and operable to pump water through a conduit;

a hydraulic unit operatively coupled to the intensifier pump; an attenuator operatively coupled to the water and operable to dampen pressure fluctuations of the water in the conduit;

a valve coupled to the conduit and operable to control the flow of the water; and

a nozzle coupled to conduit operable to direct the water along the predetermined cut pattern.

- 16. The system of Claim 14, wherein the integrated circuit package is a ball grid array package.
- 17. The system of Claim 14, wherein the water jet comprises a plurality of abrasive particles.
- 18. The system of Claim 14, wherein the suitable pressure is between approximately 500 psi and approximately 2500 psi.

The state of the s

- 19. The system of Claim 14, wherein the predetermined cut pattern comprises a plurality of edges of the integrated circuit package, wherein the integrated circuit package is formed on a polyimide strip.
- 5 20. The system of Claim 14, wherein the predetermined cut pattern comprises a pattern through an interior portion of the integrated circuit package such that the interior portion is accessible for testing.